

1. (Amended) A magnetic powder comprising:

an alloy composition represented by $R_x(Fe_{1-a}Co_a)_{100-x-y-z}B_yM_z$ (where R is at least one rare-earth element ~~except Dy~~, M is at least one element selected from Ti, Cr, Nb, Mo, Hf, W, Mn, and Zr, x is 7.1 - 9.9 at%, y is 4.6 - 8.0 at%, z is 0.1 - 3.0 at%, and a is 0 - 0.30), wherein the magnetic powder further comprises a composite structure having a soft magnetic phase and a hard magnetic phase; and

wherein when the magnetic powder is mixed with a binding resin and then the mixture is subjected to compaction molding to form a bonded magnet having a density $\rho [Mg/m^3]$, a maximum magnetic energy product $(BH)_{max}[kJ/m^3]$ of the bonded magnet at room temperature satisfies the relationship represented by the formula of $(BH)_{max}/\rho^2[x10^{-9}J\cdot m^3/g^2] \geq 2.40$, and the intrinsic coercive force H_{cJ} of the bonded magnet at room temperature is in the range of 400 - 750 KA/m.

2. (Amended) The magnetic powder as claimed in claim 1, wherein the remanent magnetic flux density $Br[T]$ of the bonded magnet at room temperature satisfies the relationship represented by the formula of $Br/\rho[x10^{-6}T\cdot m^3/g] \geq 0.125$.

3. (Amended) A magnetic powder comprising:

an alloy composition represented by $R_x(Fe_{1-a}Co_a)_{100-x-y-z}B_yM_z$ (where R is at least one rare-earth element ~~except Dy~~, M is at least one element selected from Ti, Cr, Nb, Mo, Hf, W, Mn, and Zr, x is 7.1 - 9.9 at%, y is 4.6 - 8.0 at%, z is 0.1 - 3.0 at%, and a is 0 - 0.30), wherein the magnetic powder further comprises a composite structure having a soft magnetic phase and a hard magnetic phase; and

wherein when the magnetic powder is mixed with a binding resin and then the mixture is subjected to compaction molding to form a bonded magnet having a density ρ [Mg/m³], a remanent magnetic flux density Br [T] of the bonded magnet at a room temperature satisfies the relationship represented by the formula of Br/ρ [$\times 10^{-6}$ T·m³/g] \geq 0.125 and the intrinsic coercive force H_{cJ} of the bonded magnet at room temperature is in the range of 400-750 kA/m.

4. (Amended) The magnetic powder as claimed in claim 1, wherein the magnetic powder has been obtained by milling a melt spun ribbon.

6. (Amended) The magnetic powder as claimed in claim 4, wherein the melt spun ribbon has been obtained by colliding a molten alloy of a magnetic material onto a circumferential surface of a cooling roll which is rotating to cool and then solidify the molten alloy.

8. (Amended) The magnetic powder as claimed in claim 7, wherein the outer surface layer of the cooling roll is formed of a ceramic.

9. (Amended) The magnetic powder as claimed in claim 1, wherein said R comprises rare-earth elements containing Nd and / or Pr.

10 (Amended) The magnetic powder as claimed in claim 1, wherein said R includes Pr and a ratio of Pr with respect to the total mass of said R is 5 – 75%.

12. (Amended) The magnetic powder as claimed in claim 1, wherein the magnetic powder has been subjected to a heat treatment at least once during the manufacturing process or after the manufacture of the magnetic powder.

24. (Amended) The magnetic powder as claimed in claim 3, wherein the magnetic powder has been obtained by milling a melt spun ribbon.

26. (Amended) The magnetic powder as claimed in claim 24, wherein the melt spun ribbon has been obtained by colliding a molten alloy of a magnetic material onto a circumferential surface of a cooling roll which is rotating to cool and then solidify the molten alloy.

28. (Amended) The magnetic powder as claimed in claim 27, wherein the outer surface layer of the cooling roll is formed of a ceramic.

29. (Amended) The magnetic powder as claimed in claim 3, wherein said R comprises rare-earth element containing Nd and / or Pr.

30. (Amended) The magnetic powder as claimed in claim 3, wherein said R includes Pr and a ratio of Pr with respect to the total mass of said R is 5 – 75%.

32. (Amended) The magnetic powder as claimed in claim 3, wherein the magnetic powder has been subjected to a heat treatment at least once during the manufacturing process or after the manufacture of the magnetic powder.

99